

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-07-26  
**Investment Auto Submission Date:** 2012-02-22  
**Date of Last Investment Detail Update:** 2012-07-26  
**Date of Last Exhibit 300A Update:** 2012-07-26  
**Date of Last Revision:** 2012-07-26

**Agency:** 009 - Department of Health and Human Services  
Prevention

**Bureau:** 20 - Centers for Disease Control and

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** CDC PHIN: National Electronic Disease Surveillance System

**2. Unique Investment Identifier (Ull):** 009-000001378

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

NEDSS (National Electronic Disease Surveillance System) is an initiative that promotes an Internet-based infrastructure for public health surveillance data exchange that uses PHIN (Public Health Information Network) Data Standards and includes interoperable subsystems, components, systems modules, and applications developed and implemented by CDC, state and local health departments, and commercial vendors. NEDSS relies heavily on industry standards (e.g., LOINC, SNOMED, HL7), and policy-level agreements on data access/protection of confidentiality. NEDSS represents an ongoing close collaboration between the CDC and its public health partners. When NEDSS began in 2001, no state had integrated public health surveillance systems as articulated in the NEDSS vision; today over 50 jurisdictions have implemented surveillance systems based on this vision. CDC responded to requests from states seeking assistance to obtain NEDSS software solutions, often based on local and state information technology resource constraints by developing the CDC NEDSS Base System (NBS). Today, 18 states and one territory use the NBS. NEDSS specific goals and planned achievements that will align with the Health IT Guidance Memo Policy Principle of measurably improve long term outcomes. NEDSS will continue to work with remaining states to fully adopt a NEDSS compatible system and develop refined benchmarks used to describe the status of standards-based interoperable electronic disease surveillance

systems and incorporate in the application requirements for extramural funding. Finally, provide CDC programs access to Nationally Notifiable Diseases Surveillance (NNDSS) data for all Notifiable conditions. NEDSS spends \$10.45M on extramural activities that are not part of this business case, but is a separate line on the OMB Ex53. The benefit of the investment is to achieve the NEDSS mission to improve the nation's ability to identify, monitor, and investigate diseases and conditions of public health importance, by enabling public health agencies to use information technology more effectively. This is accomplished by 1) providing leadership in the adoption of standards-based interoperable systems, which are critical for an efficient national strategy; 2) developing and supporting key tools for collecting, exchanging and analyzing information; and 3) providing resources to state and local health departments for the required personnel, training and equipment.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

· CDC WB2: Healthcare-Associated Infections Prevention Goals · HHS Goal 5: Prevent the spread of infectious diseases · CDC IT: Collaboration and innovation · HHS IT: Enable and improve the integration and quality of health and human services information This investment addresses the above key HHS and CDC goals. NEDSS is a conduit to support NNDSS. NEDSS develops and promulgates policy and standards consistent with CDC's Public Health Information Network (PHIN). This includes the use of standard vocabulary and codes as mandated by HHS under the Consolidated Health Informatics initiative and CMS Meaningful Use. NEDSS supports the development and maintenance of the NBS and the adoption of NEDSS compatible systems. NEDSS supports the development and maintenance of the Message Subscription Service (MSS), an integration data brokering tool and services, to enable electronic messaging capacity among public health stakeholders. NEDSS also supports key data provisioning activities maintained by the Division of Informatics Solutions and Operations to receive and process electronic nationally notifiable disease case notifications from state and territorial health departments. The data is used to support national surveillance activity by CDC programs. Finally, NEDSS provides extramural funding to build capacity in state and territorial health departments. This is in line with HHS and CDC goals as well as the Director's strategic priority to "strengthen epidemiology and surveillance capacity." If not fully funded, this will impact all levels of government, including reduction of 112 state personnel in 56 jurisdictions, slow down the adoption of standards-based ELR and case notification from states to CDC programs under NNDSS, and reduction of coverage by CDC to provide application, tools, training, and technical assistance to states.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

· Provided funding to 57 states/territories through the Epidemiology and Laboratory Capacity (ELC), extramural activity, to support electronic disease surveillance for the required personnel, training and equipment · Provided ongoing training and technical assistance to local/state/federal health jurisdictions to enable electronic data exchange for laboratory reports, case reports, and case notifications · As part of the National Notifiable Disease Surveillance System (NNDSS), conduct operational analysis and biweekly user group calls for

the NEDSS investment -Deployed several patch releases to address security, user interface and data handling issues -Deployed two major NBS releases -Provided a fully interactive web support portal for the NBS user group -Developed an implementation plan to incorporate the functionality of the Sexually Transmitted Disease (STD) Management Information System (MIS) into NBS -Full implementation of open source governance of the NBS application.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Current Year 2013 Planned Accomplishments: - Provide CDC Programs with access to NEDSS formatted data via data marts and views - Provide Message Mapping Guides (MMG) that describe the content of data that reporting jurisdictions should submit through NEDSS to the NNDSS - Provide funding to 57 states/territories through the Epidemiology and Laboratory Capacity (ELC), extramural activity, to support electronic disease surveillance for the required personnel, training and equipment - Provide ongoing training and technical assistance to local/state/federal health jurisdictions to enable electronic data exchange for laboratory reports, case reports, and case notifications - NBS Release 4.4.1 (Minor release, Dec 2012) will restructure the security/role administration to eliminate the dependency on commercial application, Sun One LDAP, which is being sunset by Oracle. This will simplify the security model and reduce the application's design complexity. - Deliver the STD in NBS Implementation Plan in Dec 2012 which will identify the high level requirements for STD, a gap analysis between NBS and the STD requirements, a high level solution design to address those gaps, and a plan on how/when to implement that design. - NBS Release 5.0 (Major release, Aug 2013) which will heavily concentrate on overhauling the NBS application to retire the legacy functionality of using Program Area Modules (PAMs) and replacing it with the more flexible and highly usable "PageBuilder" pages for all disease surveillance processes. - Full implementation of open source governance of the NBS application. Budget Year 2014 Planned Accomplishments: - Process redesign to allow CDC Programs easy access to automated and accurate data - Increase the number of message mapping guides (MMG) by developing multiple MMGs in parallel - Evaluate data storage and processing options for cost and performance effectiveness (e.g., Internet cloud) - Complete any elements of the STD in NBS implementation plan remaining after major Release 5.0. - Research and implement open source applications to replace proprietary commercial applications such as SAS, SQL Server, and Oracle that form part of the integrated NBS solution.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

1999-10-20

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$7.0	\$0.9	\$0.8	\$0.8
DME (Excluding Planning) Costs:	\$104.5	\$4.8	\$3.9	\$3.9
DME (Including Planning) Govt. FTEs:	\$11.6	\$1.4	\$0.6	\$0.6
Sub-Total DME (Including Govt. FTE):	\$123.1	\$7.1	\$5.3	\$5.3
O & M Costs:	\$22.6	\$4.7	\$5.7	\$5.7
O & M Govt. FTEs:	\$3.0	\$0.8	\$1.5	\$1.5
Sub-Total O & M Costs (Including Govt. FTE):	\$25.6	\$5.5	\$7.2	\$7.2
Total Cost (Including Govt. FTE):	\$148.7	\$12.6	\$12.5	\$12.5
Total Govt. FTE costs:	\$14.6	\$2.2	\$2.1	\$2.1
# of FTE rep by costs:	50	24	23	23
Total change from prior year final President's Budget (\$)		\$0.5	\$0.5	
Total change from prior year final President's Budget (%)		3.96%	3.94%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	4732	<a href="#">GST0411DB0098</a>	GS00Q09BGD0048	4735							

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-07-26

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
282142	NEDSS - Core National Notifiable Diseases Data Provisioning to CDC Programs	Standardization, receipt and processing of core notifiable disease data received from reporting jurisdictions and providing access to those data to CDC Program subject matter experts . responsible for prevention and control activities. Involves CDS, DMB, Messaging and Vocabulary.			
282483	NEDSS - Base System Development	Upgrades and enhances the systems capability to process electronic laboratory and case reporting and case management. Provide page builder functionality to support STD surveillance, including case management and notification.			

### Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
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## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

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282142	NEDSS - Core National Notifiable Diseases Data Provisioning to CDC Programs							
282483	NEDSS - Base System Development							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
282483	282483: NBS v4.2.1 Minor Release	Implement identified updates during 4.2 Alpha testing (ID: A)	2011-12-01	2011-12-01	2011-11-07	108	24	22.22%
282483	282483: NBS v4.2.1 Minor Release ELR	Enhance Electronic Laboratory Reporting (ELR) Workflow (ID: B)	2011-12-01	2011-12-01	2011-11-07	108	24	22.22%
282483	282483: NBS v4.4 Release Initiation/ Planning	Initiation/ Planning	2012-03-09	2012-03-23	2012-06-27	46	-110	-239.13%
282483	282483: NBS v4.4 Release Requirements	Requirements Analysis	2012-04-13	2012-04-13	2012-06-27	81	-75	-92.59%
282483	282483: NBS v4.4 Release Design	Preliminary Design	2012-04-17	2012-04-17	2012-06-27	83	-71	-85.54%
282483	282483: NBS v4.3 Release	Enhance Electronic Public Health Case Reporting (PHCR) Workflow (ID: C)	2012-05-01	2012-02-04	2012-01-31	151	91	60.26%
282483	282483: NBS v4.3 Release Revamp ELR	Revamp Electronic Laboratory Reporting (ELR) Workflow (ID: E)	2012-05-01	2012-02-04	2012-02-16	151	75	49.67%
282483	282483: NBS v4.4 Release Development	Development	2012-06-04	2012-05-31	2012-06-27	115	-23	-20.00%



## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
282483	282483: NBS v4.4 Release Test	Test	2012-08-20	2012-07-18		150	-11	-7.33%
282483	282483: NBS v4.4 Release Implementation	Operational Readiness/Implementation	2012-09-20	2012-08-20		125	20	16.00%

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Number of CDC programs who have access to NEDSS formatted core data via datamarts or views.	Number	Customer Results - Service Accessibility	Under target	3.000000	3.000000	3.000000	10.000000	Monthly
Number of States/sites that can receive standards-based electronic laboratory results messages (Used to determine NEDSS Compatible System status)	Number	Customer Results - Service Coverage	Over target	42.000000	46.000000		49.000000	Semi-Annual
Number of States/sites that are capable of tracking information (e.g. disease diagnosis) related to a single person across surveillance modules/information systems (Used to determine NEDSS Compatible System status) - Revised	Number	Technology - Information and Data	Over target	0.000000	0.000000		5.000000	Semi-Annual
Number of States/sites that are capable of processing/sending electronic case notification to CDC using the published CDC standard (i.e., PHIN message mapping guide in HL7	Number	Technology - Information and Data	Under target	0.000000	0.000000		5.000000	Semi-Annual

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
v2.5)								
Number of people receiving training in MSS or related tools (e.g., Orion, Rhapsody) per year (not cumulative)	Number	Technology - Effectiveness	Under target	0.000000	40.000000	40.000000	48.000000	Monthly
Provide technical assistance to at least 50% of the [57 reporting] jurisdictions in adopting standards for exchange of ELR, Case Reporting and Case Notification.	Percentage	Customer Results - Service Accessibility	Under target	50.000000	50.000000	50.000000	50.000000	Monthly